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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,774	08/03/2001	Ryuichi Toyoda	33849	8732

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EXAMINER

ELAHEE, MD S

ART UNIT	PAPER NUMBER
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2645

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/921,774

Applicant(s)

TOYODA ET AL.

Examiner

Md S Elahee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Amendment

1. This action is responsive to an amendment filed on 07/12/04. Claims 1-8 & 10-18 are pending. Claim 9 has been cancelled.

Response to Arguments

2. Applicant's arguments with respect to claims 1-8 & 10-18 have been have been considered but are moot in view of the new ground(s) of rejection which is deemed appropriate to address all of added limitations at this time.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, 5-12 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Beutler et al. (U.S. Patent No. 5,832,080).

Regarding claim 1, Beutler teaches an upper housing (i.e., first box member) including a speaker 208 (i.e., receiver) (fig.2, number 104; col.2, lines 49-66).

Beutler further teaches a lower housing (i.e., second box member) including a microphone 206 (i.e., transmitter) (fig.1, number 102; col.2, lines 49-66).

Beutler further teaches that a hinge for folding the portable cellular radio telephone (i.e., portable cellular phone), wherein the upper housing and the lower housing are rotated relative to

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each other at the hinge for folding the portable cellular radio telephone (abstract; fig.6; col.3, line 56- col.4, line 6).

Beutler further teaches a chassis constituting an internal skeleton portion of the upper housing (i.e., first box member) and the lower housing (i.e., second box member), the chassis being made of a conductor (i.e., metal part) (fig.6, number 414) and including an integrally formed hinge portions (fig.2-6; col.2, lines 49-67, col.3, lines 1-3, 10-13, 32-36, 56-67, col.4, lines 1-6).

Beutler further teaches parts other than those made of metal are employed as external parts for the upper housing and the lower housing (fig.6; col.4, lines 14-18).

Regarding claim 3, Beutler teaches that the chassis supports a substrate on which electric parts are mounted (col.3, lines 47-56).

Regarding claim 5, Beutler teaches that the chassis is used as an antenna ground plate, and a hole formed in the antenna ground plate is used to mount an antenna on a substrate (fig.5, 6; col.3, lines 47-56).

Regarding claim 6, Beutler teaches that a flex strip 402 (i.e., unit connector) is provided between portions of the hinges of the chassis in order to electrically connect the housing and the flip portion (fig.4, 6; col.3, lines 22-36).

Regarding claim 7, Beutler teaches that a unit connector includes a flexible substrate and an individual wire (i.e., coaxial cable) (fig.4; col.3, lines 22-36).

Regarding claim 8, Beutler teaches that hinge covers made inherently of the same material as the external parts are provided with the upper housing and the lower housing in order to cover the hinges (fig.1, 6).

Regarding claim 10 is rejected for the same reasons as discussed above with respect to claim 1. Furthermore, Beutler teaches that at least one hinge part of the hinge includes a reinforcing part that is stronger than external parts of the upper housing and the lower housing and the reinforcing part inherently reinforces the external parts (fig.6; col.3, line 56- col.4, line 6).

Beutler further teaches that the external parts are at least one of an upper cover of the upper housing (i.e., first box member) and a lower cover of the lower housing (i.e., second box member) (fig.6; col.4, lines 7-18).

Beutler further teaches that the reinforcing part is an upper hinge elements 110, 112 (i.e., upper hinge frame) and a lower hinge elements 114, 116 (i.e., lower hinge frame), including at least one hinge portion provided for each of the upper housing and the lower housing (fig.1, 6; col.2, lines 54-56).

Regarding claim 11, Beutler teaches that the upper hinge frame and the lower hinge frame are inserted into the external parts (fig.1, 6; col.2, lines 54-56).

Regarding claim 12, Beutler teaches that the upper hinge frame and the lower hinge frame are integrally formed with a chassis that supports a substrate (fig.1, 6; col.2, lines 54-56, col.3, lines 48-56).

Regarding claim 16, Beutler teaches that one of the upper hinge frame and the lower hinge frame is fixed to the external part with inherently one of a screw and a pawl (fig.6).

Regarding claim 17, Beutler teaches that one of the upper hinge frame and the lower hinge frame is an independent part and is securely attached to a chassis that supports a substrate,

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and the chassis is fixed to the external part with inherently one of a screw and a pawl (fig.6; col.2, lines 54-56, col.3, lines 48-56).

Regarding claim 18, Beutler teaches that only one hinged portion is formed for the upper hinge frame and for the lower hinge frame (fig.1, 6).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 4 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beutler et al. (U.S. Patent No. 5,832,080) and in view of Wu (U.S. Patent No. 6,490,438).

Regarding claim 2, Beutler fails to teach "said metal part is made of one of magnesium and an aluminum alloy". Wu teaches that the metal part is made of one of magnesium and an aluminum alloy (col.2, lines 10, 11). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Beutler to allow said metal part is made of one of magnesium and an aluminum alloy as taught by Wu. The motivation for the modification is to have doing so in order to provide light and strong material.

Regarding claims 4 and 13, Beutler fails to teach "said chassis functions as an electromagnetic absorption member and absorbs an unwanted electromagnetic wave". Wu teaches that the chassis functions as an electromagnetic absorption member and absorbs an unwanted electromagnetic wave (col.2, lines 60-66). Thus, it would have been obvious to one of

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ordinary skill in the art at the time the invention was made to modify Beutler to allow said chassis functions as an electromagnetic absorption member and absorbs an unwanted electromagnetic wave as taught by Wu. The motivation for the modification is to have doing so in order to prevent an optimal Electromagnetic Interference (EMI).

Regarding claim 14, Beutler fails to teach “a rib is formed on said chassis in order to prevent leakage of light at a portion in which said external parts engage”. Wu teaches that a conductive elastic member (i.e., rib) is formed on the chassis in order to prevent EMI (i.e., leakage of light) at a portion in which the external parts engage (col.2, lines 61-66). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Beutler to allow a rib being formed on the chassis in order to prevent leakage of light at a portion in which said external parts engage as taught by Wu. The motivation for the modification is to have doing so in order to obtain Electromagnetic Interference (EMI) protection.

Regarding claim 15, Beutler fails to teach “a rib is formed around said chassis to reinforce said external parts constituting said box members”. Wu teaches that a conductive elastic member (i.e., rib) is formed around the chassis to reinforce the external parts constituting the box members (col.2, line 61-col.3, line 3). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Beutler to allow a rib being formed around the chassis to reinforce said external parts constituting said box members as taught by Wu. The motivation for the modification is to have doing so in order to provide the less effect on the printed circuit board.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tomura et al. (US Patent No. 5,357,570) teach Interface connector mounting structure for wireless terminal device, Tomura et al. (US Patent No. 5,546,457) teach Terminal apparatus and Phillips (US Patent No. 6,058,293) teach Frame structure for cellular telephones.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Md S Elahee whose telephone number is (703)305-4822. The examiner can normally be reached on Mon to Fri from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (703)305-4895. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

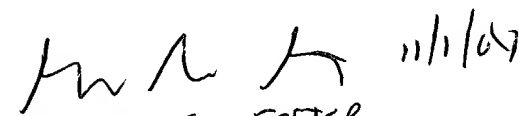
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. E.

MD SHAFIUL ALAM ELAHEE

October 30, 2004

 11/1/04
ROLAND G. FOSTER
PRIMARY PATENT EXAMINER